

USEPA/OECA/OC
State and Tribal Assistance Grant (STAG) 2000-2001
Missouri: Hazardous Waste Enforcement Data Quality Improvement Project
Quarter 4, FY2003 Report
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Reporting of Milestones and Outcomes/Results for EPA's Enforcement and Compliance Assurance Grants

Reporting Period: Year: 2003

- Oct-Dec (due last working day Jan)
- Jan-Mar (due last working day Apr)
- Apr-Jun (due last working day Jul)
- X Jul-Sep (due last working day Oct)

I. Information

State/Tribe/University or Department: Missouri Department of Natural Resources
Title of Project: Hazardous Waste Enforcement Data Quality Improvement Project
Enforcement and Compliance Assurance Grants

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Funds Received by Grantee (Date and amount): 07-01-01 for \$53,261.00

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II. Status of Project Milestones

| Project Milestones and/or comments | Anticipated Completion Date | Completion Date |
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| Hire DQA | 07-02-01 | 07-03-01 |
| Complete DQA training | 08-01-01 | 10-04-01 |
| Complete review of RCRAInfo data on formal/informal enforcement back to July 1, 1996 | 09-30-01 | 09-27-01 |
| Complete ongoing data improvement in HWP's I&E Database and ETS | Ongoing | 11-01-02 for ETS |
| Complete work on RCRAInfo to 7-1-90 | 12-31-2001 | Ongoing |
| Data review/repair done for enforcement data in I&E database to 01-01-98 | 12-31-01 | Ongoing |
| Data review/repair inspection data in I&E database to 06-30-95 | 12-31-01 | Ongoing |
| Complete data improvement in I&E database and ETS | Ongoing | 11-01-02 for ETS |
| EXTENDED MILESTONES –Second Phase of Project | | |
| DQA continues ETS review & data comparisons with RCRAInfo and DQA assures completeness & accuracy of RCRAInfo data back to 1980 and in ETS back to 7-1-98 | 07-01-03 | 11-30-03 |
| A. Methods documented to more rapidly, efficiently and accurately perform data collection and entry for reference, training and use B. Comparison/analysis completed on fields in I&E, ETS, PTS and RCRA Info to determine if they meet reporting needs, are consistent and uniform – adjust fields as needed | 08-01-03 | A. 09-12-03 B. Comparison done 8-1-03- adjustments in process |
| Compare PTS fields with RCRAInfo to determine extent of redundant data entry. If appropriate, report findings and recommendations to department management | 08-15-03 | 08-01-03 |
| A. Methods fully documented and implemented for periodic consistency checks between systems B. Standardized queries and reports for ETS, PTS and RCRAInfo completed | 09-15-03 | A. 09-10-03 B. 09-10-03 |
| A. Document guidelines for searches in “Quick Reference User’s Manual” for ETS, PTS and RCRAInfo to be used for monthly, quarterly and yearly reporting B. Complete phase out of the I&E | 10-01-03 | A. 09-10-03 B. I&E to be retained to feed other databases |
| A. Assure all appropriate inspection/enforcement staff and managers have access to ETS, PTS and RCRAInfo and received training in content, use, and reporting. B. Complete review and repair on RCRAInfo data to 1980, ETS to July 1, 1998, inspection data in I&E to July 1, 1998 | 11-30-03 | A. Database changes underway. Training pending. B. 11-30-03 repair |

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| C. Complete list of needs and recommendations for improvement with a summary report of findings/accomplishments with guidelines for future accuracy and efficiency. Share info with other states and regions. | | complete on items that do not need Regional input. C. 11-3-03 list attached |
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III. Project Status: Results/Outcomes:

We have continued to have Enforcement Database Improvement Group meetings.

While entering data into the I&E Database (I&E), I could not update/change the enforcement data that had last been updated by Cheryl Heet, the Enforcement Office Support Assistant. Ms. Heet had been instructed to check the “Final HEL Form Received” box beside the Comments section. This had not been encountered previously because I had used the “Final HEL Form Received” checkbox on the same line as the Enforcement data. Mr. Duan Bills, Computer Information Technologist, was able to give directions for updating/changing the data information. Mr. Bills indicated this was a “safety feature” to prevent deleting the return to compliance (RTC) date. The procedure is: 1) Remove the check mark beside “Final HEL Received,” located beside the Comments box. 2) Close the screen. 3) Reopen to correct inspection data screen 4) Delete the data and enter a new RTC date. 5) Check the “Final HEL Received” box located beside the comments box.

I met with Kathy Flippin, Cheryl Heet, Rachel Claunch and Carl Gates regarding fields on ETS forms/data entry comparing information in RCRAInfo to the forms.

I reviewed I&E to determine if there is missing data in the following fields and to take the action indicated:

- 1) Inspection date – delete duplicate records and fill in missing dates,
- 2) Check “commercial facilities” box if applicable and not previously checked,
- 3) Add inspectors initials if missing and available on HELs,
- 4) Check the “Class I” box if a Notice of Violation (NOV) was issued if this wasn’t previously checked,
- 5) If there was a Class 1 violation and no NOV issued, check the “Class I” box,
- 6) If the entry was due to a complaint and not an inspection, print the record for possible deletion.

I ran a query from I&E using “Is Null” in the inspection date field. This detected 132 records with no inspection date out of a total of 4084 inspections. Eighty-nine screens were printed for deletion. Ninety-one evaluations required file searches to obtain more information. This number increased considerably as I compared the total number of evaluations in I&E with those in RCRAInfo (taking into consideration evaluations that are reportable in I&E and not RCRAInfo). I found that there were evaluations that had not been entered into RCRAInfo (many of them

reevaluations). Information from the file searches was used to update the database or saved for discussion with Ms. Flippin.

The Enforcement Unit met to review a backlog of papers to determine if they needed to be filed or distributed to individuals for resolution. The papers that I received contained old HELs, Notifications of Hazardous Waste Activity, copies of Enforcement letters, inspection reports, a list of FY 2000 inspections for FY-2000 that indicated HELs were not received. To resolve the problems, I had to review I&E, RCRAInfo, and HELs filed in the books to determine if a HEL was completed and sent to the office for entry.

Some of the problems that I observed during file search were corrected, but others require direction from the hazardous waste enforcement unit chief to resolve. The following are examples of some problems encountered:

- Same evaluation entered on 2 different facilities – HCI Chemtech (Brenntag Mid-South) in Springfield and Kansas City. The evaluation, correspondence and enforcement information was mixed in three different Brenntag Mid-South records. I also discovered that the 8/1/97 Settlement Agreement (SA) penalty payment of \$10,000.00 had not been entered into Brenntag Mid-South Kansas City. In order to enter the SA and link to violations, I had to delete the RTC dates for 17 violations, enter the 310 enforcement, penalty, and payment, then re-enter the RTC dates.
- One evaluation was entered on two ID numbers in I&E but only 1 in RCRAInfo. The file check did not help to clarify where the evaluation occurred. The information was located in the Zenith file but data was entered under the ID# for Tracker Marine. The error may have occurred because the address for Zenith is 2500 E. Kearney and the address for Tracker Marine is 2500 B E. Kearney.
- An evaluation was found in Mizzou Painting file but no evaluation was entered in the database as no HEL was submitted.
- A Consent Judgement for PM Resources was not linked to the correct number of violations. In addition, an evaluation was not entered in I&E or RCRAInfo.
- A few HELs for Millennium were completed incorrectly, and consequently the database record was incorrect. I corrected these records.
- Regarding the Jim Wright Property, a HEL was submitted with one violation, but the NOV listed three violations. Another HEL form listing the other two violations was submitted and data entered at a later date (all three violations had date determined 2/19/91, which was the date of the Evaluation and the Notice of Violation). As a result, Enforcements 120, 310, and 410 were linked to only 1 violation while Enforcement 590 was linked to the last 2 violations.
- Gateway Petroleum has headquarters in Illinois. A NOV was issued to 4 different Gateway facilities in Missouri. HELs had been done for the Evaluation, Violations, and Enforcement for 3 of these facilities. Data was entered under each Missouri facility ID# but not under the Illinois Gateway ID#. Violations were noted at two facilities (2 violations) and Gateway (4 violations). However the violations was entered under the facility ID# and not Gateway (for which action was being taken). LOWs were issued for violations at 3 facilities but the RTC for all 3 facilities was on the same letter. Information was missing from each file, but documentation was found in different files and was corrected.

The Enforcement Database Improvement Group continues to work on modifying databases for more user-friendly data entry and to eliminate duplicative entry. Gordon Ackley, Computer Information Technology Supervisor, and Keith Bertels, Environmental Specialist, met with me on October 14, 2003 to observe and learn about RCRAInfo data entry. Mr. Ackley entered examples of evaluations, violations, enforcement actions, RTC dates, penalty information, and penalty paid. On October 30, 2003, I met with Brenda Irey, Research Analyst, who will be entering RCRAInfo data upon completion of this grant project. Ms. Irey entered evaluations, violations, enforcement actions, RTC dates, penalty information and penalty paid. I gave a copy of my RCRAInfo data entry instructions to her.

On September 12, 2003, Ms. Flippin and I discussed the questions/problems needing answers/directives prior to data entry. Since my job assignment will soon end, it was agreed that I would copy the original HEL forms and include the copies with question/problems, filing the original HELs. Staff will continue work to resolve those problems. I prepared a notebook labeled “Questions and Problems from Fees and Taxes and Enforcement File Search.” This notebook contains my notes from I&E queries, enforcement file reviews, and on the question/problem to be resolved.

I prepared another notebook labeled “Info Re: Data Entry” containing information about data entry and reports in RCRAInfo, Enforcement Tracking System (ETS), Production Tracking System (PTS), Online Tracking Information System (OTIS), and RCRARep.

I ran an I&E query showing evaluations prior to 1993 where “Final HEL Form Received” check box had not been checked. I verified that the HELs had been received and updated the data screens when appropriate.

On October 20, 2003, Ms. Flippin requested information on the number and type of evaluations and enforcement actions from 10/01/2002 through 09/30/2003. This information was obtained from RCRARep. Prior to July 1, 2003 NOVs and LOWs were coded 120 and Abatement (Administrative) Orders (AOs) and Settlement Agreements (SAs) were coded 310. Starting on July 1, 2003, NOVs were coded 130, LOWs were coded 122, AOs were coded 311 and SAs were coded 318. I ran a printout and opened each 120 and 310 to determine the enforcement type. I added the numbers to obtain the total for each enforcement type.

Ms. Heet and I compared enforcement activities entered into RCRAInfo, I&E (enforcement arm), and ETS. Information was missing in all three databases. We are notifying each Environmental Specialist of the inconsistencies and will update all three databases with their assistance.

Outcome Measures:

IV.

| Funding Area – with Goal | Outcome Measurement |
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| Data Quality – Improve and streamline | 1. State has incorporated performance |

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| inspection/enforcement data in state systems for more accurate and consistent reports of work performed to the public and to EPA | <p>outcome measures into their ETS.</p> <ol style="list-style-type: none"> 2. EPA has had fewer problems with MO data in RCRAInfo after the grant. 3. Reporting problems are identified early, queries are performed, and data is corrected in a timely manner as compared to the previous fiscal year. 4. By this work, the number of reporting problems has decreased, as has the time necessary to produce reports in the past fiscal year. |
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V. Other

Recommendations for Enforcement Data Quality Improvements Hazardous Waste Program Missouri Department of Natural Resources

The following list of recommendations was prepared following completion of Missouri's Hazardous Waste Enforcement Data Quality Improvement Project. The project was made possible by a grant from the U.S. Environmental Protection Agency. The grant period was 7-03-01 to 11-30-03 and the actions below have been undertaken or completed.

Database Improvements

1. Modify systems so that inspection and enforcement data can be entered into one system that will populate other databases.
2. Correct database system problems in a timely manner so that complete and accurate data can be recorded.
3. Computer support must be responsive, effective and timely.
4. The system used should have all fields necessary for the state to report their inspection and enforcement accomplishments to the public and to the federal government.
5. The system chosen should be user-friendly for data entry and report production.
6. Field titles and reports should be clear and easily interpreted by all.
7. Standard reports should be produced from the primary system for staff use to evaluate and summarize inspection/enforcement progress and accomplishments.
8. Evaluate Handler and Evaluation Logs as received for errors and omissions. Resolve and correct errors prior to data entry.
9. Run queries to check on data accuracy on a monthly basis. Correct errors as found.
10. On a monthly basis, enforcement case managers will review each action taken during the month (i.e., inspections, sample collection, notices of violation, orders, final settlement agreements, etc.). Handler and Evaluation Logs will be prepared at that time for any action not yet documented to assure that data gaps do not reoccur.
11. Communication/training/assistance will be ongoing and current with regional office staff to notify of missing or incorrect Handler and Evaluation Logs. Databases must be refreshed on

a weekly basis and training/assistance will be provided to regional offices if action is needed by that office to complete the refresh process.

12. Databases must be refreshed on a weekly basis and training/assistance will be provided to regional offices if action is needed by that office to complete the refresh process.

Training Improvements

1. All staff must be trained in understanding the required data elements, Handler and Evaluation Log preparation, and to view data from the system regarding actions they have taken.
2. Unit and Section Chiefs should be trained to view inspection and enforcement data from the system and to run fundamental reports.
3. Training/assistance will be provided to a regional office if action is needed by that office to complete the refresh process.